P29138 A04

N THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants : Akiko ITAI et al. Group Art Unit : Not Assigned Yet

Appln. No. : 10/564,407 Examiner : Not Assigned Yet

(National Stage of PCT/JP2004/010558)

I.A. Filed : July 16, 2004 Confirmation No.: 3483

For : MEDICAMENT FOR TREATMENT OF DERMAL PIGMENTATION

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
U.S. Patent and Trademark Office
Customer Service Window, Mail Stop AMENDMENT
Randolph Building
401 Dulany Street
Alexandria, VA 22314

Sir:

In accordance with the duty of disclosure under 37 C.F.R. §1.56 and §§1.97-1.98, Applicants hereby bring to the attention of the Examiner an International Search Report with respect to International Application PCT/JP2004/010558, of which the present application is the U.S. national stage application:

- (1) U.S. Patent Publication No. 2003/0083386;
- (2) WO 02/076926 A1;
- (3) WO 02/067919 A1;
- (4) Japanese Laid-open Patent Publication (KOKAI) HEI 11-21225, together with an English language abstract of the same;

: 4

- (5) WO 03/103655 A1, together with English language family member, European Patent Publication No. EP 1 535 610 A1; Applicants note that this document is also cited at page 2, line 24 of the present application;
- (6) WO 2004/006906 A2;
- (7) WO 02/49632, together with English language family members, European Patent Publication No. EP 1 352 650 A1 and U.S. Patent Publication No. 2004/259877.
- (8) BERKING, et al., American Journal of Pathology, 2001, Vol. 158, No. 3, pp. 943-953; and
- (9) SINGH, et al., Histology and Histopathology, 2000, Vol. 15, pp. 843-849.

Applicants further bring to the Examiner's attention the following documents, which are cited in the specification of the present application:

- (10) RECIO, et al., Cancer Research, 2002, Vol. 62, No. 22, pp. 6724-6730, cited in the specification beginning at page 2, line 2;
- (11) U.S. Patent No. 4,358,443, cited in the specification beginning at page 2, line 11;
- (12) European Patent Publication No. 0 221 211 (which is a family member of Japanese Patent Publication (KOKAI) No. 62-99329, listed below), cited in the specification beginning at page 2, line 13;
- (13) Japanese Patent Publication (KOKAI) No. 62-99329, cited in the specification beginning at page 2, line 13;
- (14) U.S. Patent No. 6,117,859, cited in the specification beginning at page 2, line 14;
- (15) WO 99/65499, cited in the specification beginning at page 2, line 15;

: 3

- (16) WO 02/076918, together with English language family members, European Patent Publication No. EP 1 314 712 and U.S. Patent Application Publication No. 2004/122244, cited in the specification beginning at page 2, line 16;
- (17) WO 02/051397, together with English language family members, European Patent Publication No. EP 1 344 525 and U.S. Patent Application Publication No. 2004/048891, cited in the specification beginning at page 2, line 18;
- (18) WO 03/103654, together with English language family member, European Patent Publication No. EP 1 535 609, cited in the specification beginning at page 2, line 22.
- (19) WO 03/103657, together with English language family member, European Patent Publication No. EP 1 555 018, cited in the specification beginning at page 2, line 26;
- (20) WO 03/103648, together with English language family member, European Patent Publication No. EP 1 510 207, cited in the specification beginning at page 2, line 28;
- (21) WO 03/103665, together with English language family member, European Patent Publication No. EP 1 514 544, cited in the specification beginning at page 2, line 30;
- (22) WO 03/103647, together with English language family member, European Patent Publication No. EP 1 512 396, cited in the specification beginning at page 2, line 32; and

(23) WO 03/103658, together with English language family member, European Patent Publication No. EP 1 510 210, cited in the specification beginning at page 2, line 33.

Applicants also bring to the attention of the Examiner the following copending, and commonly assigned, U.S. Patent Applications and published PCT Applications:

- (24) U.S. Application No. 10/433,619, and corresponding International Patent Application Publication WO 02/049632;
- U.S. Application No. 10/515,341, and corresponding International Patent Application Publication WO 03/103648;
- (26) U.S. Application No. 10/515,343, and corresponding International Patent Application Publication WO 03/103658;
- U.S. Application No. 10/515,623, and corresponding International Patent Application Publication WO 03/103665;
- (28) U.S. Application No. 10/515,342, and corresponding International Patent Application Publication WO 03/103647;
- (29) U.S. Application No. 10/516,294, and corresponding International Patent Application Publication WO 03/103654;
- U.S. Application No. 10/515,622, and corresponding International Patent Application Publication WO 03/103656;
- U.S. Application No. 10/516,292, and corresponding International Patent Application Publication WO 03/103655;

1 4

(32) U.S. Application No. 10/516,293, and corresponding International Patent Application Publication WO 03/103657.

Applicants also bring the following information to the attention of the Examiner, which has been provided to the Office in the above-listed copending, and commonly assigned, applications:

- (33) CLARK, et al., Nucleic Acids Research, Vol. 14, No. 20, pp. 7897-7913 (1986);
- (34) NEDOSPASOV, et al., Cold Spring Harbor Symposia on Quantitative Biology,Vol. 51, pp. 611-624 (1986);
- (35) VERMA, et al., Genes & Development, Vol. 9, pp. 2723-2735 (1995);
- (36) DiDONATO, et al., Nature, Vol. 388, pp. 548-554 (1997);
- (37) RÉGNIER, et al., Cell, Vol. 90, pp. 373-383 (1997);
- (38) WORONICZ, et al., Science, Vol. 278, pp. 866-869 (1997);
- (39) ZANDI, et al., Cell, Vol. 91, pp. 243-252 (1997);
- (40) KOPP, et al., Science, Vol. 265, pp. 956-959 (1994);
- (41) YIN, et al., Nature, Vol. 396, pp. 77-80 (1998);
- (42) SCHEINMAN, et al., Science, Vol. 270, pp. 283-286 (1995);
- (43) MANNA, et al., Journal of Immunology, Vol. 164, pp. 2095-2102 (1999);
- (44) SULLIVAN, et al., J. Med. Chem., Vol. 41, pp. 413-419 (1998);
- (45) MATSUMOTO, et al., Bioorganic & Medicinal Chemistry Letters, Vol. 10, pp. 865-869 (2000);
- (46) OKAMOTO, 18th Meeting of Japanese Inflammatory Society, pp. 57, (2000), accompanied by an English translation;

- (47) MACIELAG, et al., J. Med. Chem., Vol. 41, pp. 2939-2945 (1998);
- (48) ZWAAGSTRA, et al., Eur. J. Med. Chem., Vol. 31, pp. 861-874 (1996);
- (49) SHARANIN, Zh. Org. Khim., Vol. 16, pp. 2185-2188 (1980), accompanied by an English language Abstract (provided by Chem. Abstract; 94:192195c);
- (50) YAMAMOTO, et al., Chem. Pharm. Bull., Vol. 44, No. 4, pp. 734-745 (1996);
- (51) SOUTH, et al., J. Heterocyclic Chem., Vol. 28, pp. 1017-1024 (1991);
- (52) TAJIKA, Yakugaku Zasshi, Vol. 81, pp. 1456-1459 (1961), accompanied by a partial English language translation;
- (53) OKAMIYA, Nihon Kagaku Zasshi, Vol. 83, pp. 209-211 (1962), accompanied by a partial English language translation;
- (54) YURA, et al., Chem. Pharm. Bull., Vol. 10, pp. 376-382 (1962);
- (55) DIÉZ-BERRA, et al., Tetrahedron, Vol. 53, No. 33, pp. 11437-11448 (1997);
- (56) HILL, et al., Cell, Vol. 73, pp. 395-406 (1993);
- (57) MADAN, et al., Molecular Pharmacology, Vol. 58, No. 3., pp. 526-534 (2000);
- (58) MATSUZAKI, et al., Amer. J. Reproductive Immunol., 1986, Vol. 40, pp. 291-294;
- (59) UCHIIDE, et al., Nikkei Medical, 2002, No. 415, page 28, accompanied by an English translation;
- (60) UCHIIDE, et al., Fertility and Sterility, 2002, Vol. 78, No. 4, page 782-786;
- (61) CHEGINI, Frontiers in Bioscience, 2002, Vol. 7, page e91-115;
- (62) AISEN, Journal of Pain and Symptom Management, 2002, Vol. 23, No. 4, page S35-40;
- (63) BAUD, et al., Trends in Cell Biology, 2001, Vol. 11, No. 9, page 372-377;
- (64) DAIDONE, et al., Farmaco, 1989, Vol. 44, No. 5, page 465-473;

2 8

- (65) DJURIC et al., Journal of Medicinal Chemistry, 2000, Vol.43, No.16, pp. 2975-2981:
- (66) DOU, et al., Proceedings of The National Academy of Sciences of the United States of America, 2003, Vol.100, No. 2, page 721-726;
- (67) DUMAS, et al., Bioorganic and Medicinal Chemistry Letters, 1999, Vol. 9, No.17, pp. 2531-2536;
- (68) ELDAR-FINKELMAN, Trends of Molecular Medicine, 2002, Vol. 8, No. 3, pp. 126-132;
- (69) FRAME, et al., The Biochemical Journal, 2001, Vol. 359, No. PT1, page 1-16;
- (70) HOSHI, et al., Proceedings of The National Academy of Sciences of the United States of America, 1996, Vol. 93, No. 7, pp. 2719-2723;
- (71) HIS, R. et al., The Journal of Organic Chemistry, 1972, Volume 37, No. 22, pp. 3427-3431;
- (72) HUNT, et al., The Journal of the Chemical Society, 1956, pp. 3099-3107;
- (73) INABA, et al., Chemical and Pharmaceutical Bulletin, 2000, Vol. 48, pp. 131-139;
- (74) ISHIGE, et al., Yakugaku Zasshi, 1999, Vol. 119, No. 7, pp. 510-518;
- (75) KANG, et al., Neuroreport, 2001, Vol. 12, No.7, pp. 1449-1452;
- (76) KARIN, et al., Proceedings of The National Academy of Science of The United States of America, 1998, Vol. 95, No.16, pp. 9067-9069;
- (77) KARTTUNEN, et al., Proceedings of the National Academy of Sciences of United States of America, 1991, Volume 88, No. 9, pp. 3972-3976;

- (78) KAYTOR, et al., Current Opinion of Neurobiology, 2002, Vol. 12, No. 3, pp. 275-278;
- (79) KIM, et al., The Journal of Clinical Investigation, 2001, Volume 108, No. 3, pp. 437-446;
- (80) KLOSA, Journal für Praktische Chemie, 1964, Volume 25, No.1-2, page 48-55 together with English language Abstract (provided by Chemical Abstracts) of the same, Column 4022, paragraph 6-Column 4023;
- (81) KONTA, et al., The Journal of Biological Chemistry, 2001, Vol. 276, No. 16, pp. 12697-12701;
- (82) LADVA, et al., Indian Journal of Chemistry, Section B, 1996, Vol. 35B, No.10, pp. 1062-1066;
- (83) LEE, et al., Proceedings of The National Academy of Science of The United States of America, 1998, Vol. 95, No.16, pp. 9319-9324;
- (84) MAILLIOT, et al., Annals of The New York Academy of Science, 2000, Vol. 920, pp. 107-114;
- (85) MATTSON, et al., The Journal of Clinical Investigation, 2001, Vol. 107, No. 3, pp. 247-254;
- (86) MATTSON, et al., Cell and Tissue Research, 2000, Vol. 301, No. 1, pp. 173-187;
- (87) MILLET, et al., The Journal of Biological Chemistry, 2000, Vol. 275, No. 20, pp. 15114-15121;
- (88) MORI, et al., Yakugaku Zasshi, 1975, Vol. 95, No. 12, pp. 1477-1482, together with an English language abstract of the same;

- (89) NOBLE, et al., Neuron, 2003, Vol. 38, No. 4, pp. 555-565;
- (90) PALANKI, et al., Current Medicinal Chemistry, 2002, Volume 9, No. 2, page 219-227;
- (91) PHIEL, et al., Nature, 2003, Vol. 423, No.6938, pp. 435-439;
- (92) PIU, F. et al., Molecular and Cellular Biology, 2001, Vol. 21, No. 9, pp. 3012-3024;
- (93) ROBERT-PIESSARD, et al., Pharmaceutical Science, 1997, Vol. 3, No. 5/6, pp. 295-299;
- (94) SATO, et al., The Journal of Biological Chemistry, 2002, Vol. 277, No. 44, pp. 42060-42065;
- (95) UMEZAWA, Surgery Frontier, 2002, Vol. 9, No. 2, pp. 88-91, together with Enalish language translation of the same;
- (96) UPADHYAY, et al., Indian Journal of Heterocyclic Chemistry, 1991, Vol. 1,No. 2, pp. 71-74;
- (97) WAISSER, et al., Archiv der Pharmazie, 1998, Vol. 331, No.1, pp. 3-6;
- (98) WAJANT, Cellular Signaling, 2001, Vol. 13, No. 6, pp. 389-400;
- (99) WEST, et al., Analytical Biochemistry, 1990, Volume 190, No. 2, pp. 254-258;
- (100) WON, et al., Neuroscience, 1999, Vol. 94, No.1, pp. 83-91;
- (101) YIN, et al., Cell, 1998, Vol. 93, No. 5, pp. 875-884;
- (102) XU, et al., The Journal of Neuroscience, 2001, Vol. 21, No.1, RC118, 5 pages;
- (103) YAMAMOTO, et al., The Journal of Clinical Investigation, 2001, Vol. 107, No. 2, pp. 135-142;

- (104) YUAN, et al., Science, 2001, Volume 293, pp. 1673-1677;
- (105) OHSUGI, et al., Yakugaku Zasshi, 1976, Vol. 96, No. 2, pp. 165-169, together with an English language Abstract of the same;
- (106) U.S. Patent No. 4,560,549;
- (107) U.S. Patent No. 4,742,083;
- (108) U.S. Patent No. 4,725,590;
- (109) U.S. Patent No. 5,958,911;
- (110) U.S. Patent No. 4,287,191;
- (111) U.S. Patent No. 3,331,874;
- (112) U.S. Patent No. 3,906,023;
- (113) U.S. Patent No. 4,661,630;
- (114) U.S. Patent No. 6,225,329;
- (115) U.S. Patent No. 6,262,044;
- (116) U.S. Patent No. 6,410,586;
- (117) U.S. Patent Publication No. 2002/002199 A1;
- (118) U.S. Patent Publication No. 2002/019412 A1;
- (119) U.S. Patent Publication No. 2002/165398 A1;
- (120) U.S. Patent Publication No. 2003/069267 A1;
- (121) G.B. Patent No. 996,074;
- (122) WO 97/09315, which is a family member of JP 11-512399 and U.S. family members U.S. 5,852,028, U.S. 5,811,428, and U.S. 5,935,966;
- (123) JP 9-227561, accompanied by an English language abstract (provided by esp@cenet);

- (124) JP 10-87491, accompanied by an English language abstract;
- (125) EP 1 018 514 A1, which is a family member of WO 00/05234;
- (126) JP 10-45738, accompanied by an English language abstract (provided by esp@cenet);
- (127) WO 93/24115;
- (128) WO 96/17832;
- (129) WO 98/20864;
- (130) WO 99/24404, together with U.S. family member U.S. Patent No. 6,022,884;
- (131) WO 99/46267, together with family member, Japanese Patent Publication No. 2002-506072, together with U.S. family members;
- (132) WO 99/55663 together with U.S. family members U.S. Patent No. 6,653,309 and U.S. Patent Publication No. 2004/087650 A1;
- (133) WO 00/03991;
- (134) WO 00/35442;
- (135) WO 01/00213;
- (136) WO 01/44217;
- (137) WO 01/68648;
- (138) WO 01/98290 together with Japanese family member JP2004-501146 and family member U.S. Patent No. 6,414,013;
- (139) WO 02/28819;
- (140) European Patent Publication No. EP 1 088 819, together with family member Japanese Patent Publication No. 2001-114768 and U.S. family members U.S. Patent No. 6,787,652 and U.S. Patent Publication No. 2004/157844 A1;

- (141) European Patent Publication No. EP 0 551 849, together with family member Japanese Laid-open Patent Publication No. HEI 6-9476 and U.S. family members U.S. Patent Nos. 5,589,514; 5,776,977 and 6,159,988;
- (142) European Patent Publication No. EP 0 452 873, together with family member Japanese Laid-open Patent Publication No. HEI 4-217981 and U.S. family member U.S. Patent No. 5,126,341;
- (143) European Patent Publication No. EP 0 483 881;
- (144) European Patent Publication No. EP 1 205 478, which is also the publication for WO 01/10865;
- (145) European Patent Publication No. EP 0 198 456;
- (146) European Patent Publication No. EP 1 219 596, which is a family member of WO 01/12588, together with an English language Abstract and U.S. family member U.S. Patent No. 6,566,394;
- (147) European Patent Publication No. EP 0 317 991, which is a family member of Japanese Laid-open Patent Publication No. HEI 2-138260, together with an English language Abstract and family members U.S. Patent Nos. 4,786,644; 4,952,588 and 4,966,906;
- (148) European Patent Publication No. EP 0 221 346, which is a family member of Japanese Laid-open Patent Publication No. SHO 62-81359, together with an English language Abstract and U.S. family member U.S. Patent No. 4,939,133;
- (149) Japanese Patent Publication No. 2000-80041, together with an English language Abstract (provided by PATENT ABSTRACT OF JAPAN);

1. 3.

: 1

- (150) Japanese Patent Publication No. HEI 9-169747, together with an English language Abstract (provided by PATENT ABSTRACT OF JAPAN);
- (151) Japanese Patent Publication No. SHO 63-104912, together with an English language Abstract (provided by PATENT ABSTRACT OF JAPAN);
- (152) Japanese Patent Publication No. HEI 11-21243, together with an English language Abstract (provided by PATENT ABSTRACT OF JAPAN);
- (153) Japanese Laid-open Patent Publication No. HEI 11-217361, together with an English language Abstract (provided by PATENT ABSTRACT OF JAPAN);
- (154) Japanese Laid-open Patent Publication No. HEI 8-175990, together with an English language Abstract (provided by PATENT ABSTRACT OF JAPAN);
- (155) Japanese Laid-open Patent Publication No. HEI 4-217916, together with an English language Abstract (provided by PATENT ABSTRACT OF JAPAN);
- (156) Japanese Laid-open Patent Publication No. SHO 62-30780, together with an English language Abstract and family member U.S. Patent Nos. 4,659,710 and 4,690,924;
- (157) Japanese Laid-open Patent Publication No. 2000-169479, together with an English language Abstract (provided by PATENT ABSTRACT OF JAPAN);
- (158) Japanese Laid-open Patent Publication No. 52-110835, together with an English language Abstract (provided by PATENT ABSTRACT OF JAPAN);
- (159) United Kingdom Patent Publication No. GB 2 031 410;
- (160) United Kingdom Patent Publication No. GB 1 099 865, together with family member French Patent Publication No. FR 1 481 713.

P29138 A04

Copies of the above-noted documents (with the exception of U.S. Patents and U.S. Patent Applications) are attached hereto and all of the documents are listed on the attached PTO-1449 Form. Furthermore, a copy of the International Search Report (in English) for International Application PCT/JP2004/010558 and the corresponding International Preliminary Report on Patentability (in English) are attached hereto as well. The Examiner is requested to initial the appropriate spaces on the attached Form and to return a copy of the initialed Form to Applicants with the next official communication in the present application.

Further to the U.S. Patent and Trademark Office's decision to partially waive the requirements under 37 C.F.R. § 1.98 (a)(2)(i) and (iii), copies of the U.S. patents and U.S. patent applications cited above are not enclosed herewith. However, if any copies are needed, the Examiner is respectfully requested to contact the undersigned.

Applicants note that an Office Action on the merits has not issued in the present application, and thus no fee is believed necessary to ensure consideration of the submitted material. However, if any fee is necessary for consideration of this Information Disclosure Statement, the undersigned hereby authorizes the charging of any fee necessary for the consideration of this statement, including any payment under 37 C.F.R. §1.17 (p), to Deposit Account No. 19-0089.

Should the Examiner have any questions, the Examiner is invited to contact the undersigned at the below-listed telephone number.

Respectfully Submitted, Akiko ITAI et al.

Bruce H. Bernstein

June 23, 2006 GREENBLUM & BERNSTEIN, P.L.C. 1950 Roland Clarke Place Reston, VA 20191 (703) 716-1191 P29138.P3u FORM PTO-1449 U.S. Department of Commerce Atty. Docket No. Application No. Patent and Trademark Office | P29138 10/564.407 Applicant SISCLOSURE STATEMENT

	INFORM	ATT				SUI		STA	TEMENT		Applicant Akiko ITA						
•	(U:	se s	ever	ral s	hee	ts if	nece	essa	ry)	Filing Date Group July 16, 2004 Unknown							
									U.S. PATER	NT DOCUM	ENTS						
EXAMINER INITIAL			DO	CUM	ENT	NUM	BER		DATE		NAME	CLA	ss	SUBCLASS	JBCLASS IF APPROPRIA		
	2003	0	0	8	3	3	8	6	05/01/03	YUAN 6	et al.						
	2004	1	2	5	9	8	7	7	12/23/04	MUTO	et al.						
		4	3	5	8	4	4	3	11/09/82	COBUF	RN et al.						
		6	1	1	7	8	5	9	09/12/00	EVANS	et al.						
	2004	7	1	2	2	2	4	4	06/24/04	SUZUK	l et al.						
	•				_				FOREIGN PAT	ENT DOCL	MENTS	·					
		DOCUMENT NUMBER							DATE	COL	INTRY	CLASS		SUBCLASS	TRANS YES	LATION NO	
	02	1	0	7	6	9	2	6	10/03/02	W.I.P.C	,						
	02	1	0	6	7	9	1	9	09/06/02	W.I.P.C	,						
	11	-		2	1	2	2	5	01/26/99	JAPAN							
	03	1	1	0	3	6	5	5	12/18/03	W.I.P.O							
		1	5	3	5	6	1	0	06/01/05	E.P.O							
	2004	1	0	0	6	9	0	6	01/22/04	W.I.P.O							
	02	1		4	9	6	3	2	06/27/02	W.I.P.O							
		1	5	3	2	6	5	0	10/15/03	E.P.O							
		0	2	2	1	2	1	1	05/13/87	E.P.O							
	62	-		9	9	3	2	9	05/08/87	JAPAN							
	99	/		6	5	4	9	9	12/23/99	W.I.P.O							
	02	1	0	7	6	9	1	8	10/03/02	W.I.P.O	,						
		1	3	1	4	7	1	2	05/28/03	E.P.O			T				
	02	1	0	5	1	3	9	7	07/04/02	W.I.P.O							
		1	3	4	4	5	2	5	09/17/03	E.P.O							
	03	1	1	0	3	6	5	4	12/18/03	W.I.P.O							
		1	5	3	5	6	0	9	06/01/05	E.P.O							
				0	THE	R DO	CUM	ENT	S (Including A	uthor, Title	Date, Pertin	ent Pages	, Etc.)				
	1	Er	nglis	h La	angu	age	Abs	strac	t of JP 11-2	1225.							
	2	BE	RK	ING	, et	al., /	4me	rica	n Journal of	Patholog	y, 2001, Vo	J. 158, N	lo. 3, į	pp. 943-953	3.		
	3	SI	NGI	l, et	t al.,	His	tolog	ју а	nd Histopath	ology, 20	00, Vol. 15	, pp. 843	8-849.				
	4	RI	CIC), et	t al.,	Car	ncer	Res	earch, 2002	2, Vol. 62,	No. 22, pp	. 6724-6	730.				
	5	ш	S A	nnli	catio	on N	n 1	0/43	3 619								

U.S. Application No. 10/433,619 6 U.S. Application No. 10/515,341

EXAMINER /Paul Dickinson/ DATE CONSIDERED 03/26/2008

*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

DATE CONSIDERED 03/26/2008

KOPP, et al., Science, Vol. 265, pp. 956-959 (1994).

21 KOPP, 6

EXAMINER /Paul Dickinson/

P29138.P3	30									Sheet 3 of						
FORM PTO-	1449		artment of Co and Tradema		Atty. Doo P29138	tty. Docket No. Application No. 10/564,407										
1	NFORM	IATION DISCLOSURE STA BY APPLICANT	TEMENT		Applicant Akiko ITA											
2	(U:	se several sheets if necessa	ary)		Filing Da July 16, 2			Group Unknov	vn							
			U.S. PATEN	T DOCUM	NTS											
EXAMINER INITIAL		DOCUMENT NUMBER	DATE		NAME	CLASS	su	BCLASS	FILING IF APPRO	DATE OPRIATE						
	L		FOREIGN PAT	ENT DOC	MENTS											
——т			TOREIGNETAL	LIVI DOCE	MENTO				TRANSI	ATION						
		DOCUMENT NUMBER	DATE	COL	NTRY	CLASS	SUB	CLASS	YES	NO						
		OTHER DOCUMENT	S (Including A)	ıthor Title	Date, Pertin	ent Pages. Etc)									
	22	YIN, et al., Nature, Vol. 3														
	23	SCHEINMAN, et al., Scien		<u> </u>	-286 (1995).		-								
	28	MANNA, et al., Journal of Immunology, Vol. 164, pp. 2095-2102 (1999). SULLIVAN, et al., J. Med. Chem., Vol. 41, pp. 413-419 (1998).														
	28															
-	28	MATSUMOTO, et al., Bioorganic & Medicinal Chemistry Letters, Vol. 10, pp. 865-869 (2000).														
	27	OKAMOTO, 18th Meeting English translation.	OKAMOTO, 18th Meeting of Japanese Inflammatory Society, pp. 57, (2000), accompanied by an													
	28	MACIELAG, et al., J. Med	. Chem., Vol.	41, pp. 2	2939-2945	(1998).										
	28	ZWAAGSTRA, et al., Eur.														
	30	SHARANIN, Zh. Org. Khi Abstract (provided by Che	m., Vol. 16, p em. Abstract;	op. 2185- 94:19219	2188 (198 95c)	0), accompa	anied	by an Er	iglish lang	uage						
	31	SOUTH, et al., J. Heteroc	yclic Chem.,	Vol. 28, p	p. 1017-10	024 (1991).										
	32	TAJIKA, Yakugaku Zass language translation .	hi, Vol. 81,	pp. 145	5-1459 (19	961), accom	panie	ed by a	partial Er	ıglish						
	33	OKAMIYA, Nihon Kagaku language translation.	ı Zasshi, Vol	. 83, pp.	209-211 (1962), acco	mpar	ied by a	partial Er	nglish						
	34	YURA, et al., Chem. Phar	m. Bull., Vol.	10, pp. 3	76-382 (19	962).										
	35	DIÉZ-BERRA, et al., Tetra	ahedron, Vol.	53, No. 3	33, pp. 114	37-11448 (1	1997)									
	36	HILL, et al., Cell, Vol. 73,	pp. 395-406 ((1993);												
	37		MADAN, et al., Molecular Pharmacology, Vol. 58, No. 3., pp. 526-534 (2000).													
	38	MATSUZAKI, et al., Amer	. J. Reproduc	tive Imm	unol., 1986	5, Vol. 40, p	p. 291	-294.								
	39	UCHIIDE, et al., Nikkei M	edical, 2002,	No. 415,	page 28, a	accompanie	by a	n English	translation	on.						
	40	UCHIIDE, et al., Fertility	and Sterility,	2002, Vo	. 78, No. 4	, page 782-	786.									
	41	CHEGINI, Frontiers in Bio														
	42	AISEN, Journal of Pain ar	nd Symptom						40							
EXAMINER	/Paul	Dickinson/		DA	TE CONSI	DERED 03	1/26/2	800								

*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

FORM PTO-1449 U.S. Department of Commerce Atty. Docket No. Patent and Trademark Office

P29138 Applicant Akiko ITAI et al.

INFORMATION DISCLOSURE STATEMENT

Application No.

10/564,407

					July 16, 2004 Unknown										
			U.S. PATENT	DOCUMENTS											
XAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	IF APPRO	FILING DATE IF APPROPRIAT							
			FORFIGN BATE	NT DOCUMENTS											
			FOREIGN PATE	NT DOCUMENTS	TT		TRANSL	ATION							
		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	YES	N							
		OTHER DOCUMENT	S (Including Aut	hor, Title, Date, Pert	inent Pages, Etc	:.)	l								
	41	BAUD, et al., Trends in C	ell Biology, 20	01, Vol. 11, No. 9	, page 372-37	7									
	47	DAIDONE, et al., Farmac	o, 1989, Vol. 4	4, No. 5, page 46	35-473.										
	43	DJURIC et al., Journal of	Medicinal Che	mistry, 2000, Vol	.43, No.16, pp	2975-2981.									
	48	DOU, et al., Proceedings 2003, Vol.100, No. 2, pag		nal Academy of	Sciences of the	ne United Sta	ites of Ame	erica,							
	45	DUMAS, et al., Bioorganic and Medicinal Chemistry Letters, 1999, Vol. 9, No.17, pp. 2531-2536.													
	45	ELDAR-FINKELMAN, Trends of Molecular Medicine, 2002, Vol. 8, No. 3, pp. 126-132.													
	47	FRAME, et al., The Biochemical Journal, 2001, Vol. 359, No. PT1, page 1-16.													
	48	HOSHI, et al., Proceeding 1996, Vol. 93, No. 7, pp. 2		onal Academy of	Sciences of t	he United Sta	ates of Ame	erica,							
	45	HIS, R. et al., The Journal of Organic Chemistry, 1972, Volume 37, No. 22, pp. 3427-3431. HUNT, et al., The Journal of the Chemical Society, 1956, pp. 3099-3107.													
	50														
	51	INABA, et al., Chemical and Pharmaceutical Bulletin, 2000, Vol. 48, pp. 131-139.													
	52	ISHIGE, et al., Yakugaku Zasshi, 1999, Vol. 119, No. 7, pp. 510-518													
-	53	KANG, et al., Neuroreport	t, 2001, Vol. 1	2, No.7, pp. 1449	-1452.										
	54	KARIN, et al., Proceeding 1998, Vol. 95, No.16, pp.		onal Academy of	Science of T	he United Sta	ates of Ame	erica,							
	55	KARTTUNEN, et al., Pr America, 1991, Volume 8			cademy of S	ciences of U	nited State	es of							
	56	KAYTOR, et al., Current (Opinion of Neu	robiology, 2002,	Vol. 12, No. 3	, pp. 275-278									
	57	KIM, et al., The Journal of	f Clinical Inves	tigation, 2001, Vo	olume 108, No	o. 3, pp. 437-4	146.								
	58	KLOSA, Journal für Pra English language Abstrac 6-Column 4023.	ktische Cherr t (provided by	nie, 1964, Volum Chemical Abstra	ne 25, No.1-2 acts) of the sa	2, page 48-5 me, Column 4	5 together 1022, parag	with graph							
	59	KONTA, et al., The Journ	al of Biologica	Chemistry, 2001	, Vol. 276, No	. 16, pp. 126	97-12701.								
	60	LADVA, et al., Indian Jour	rnal of Chemis	try, Section B, 19	96, Vol. 35B,	No.10, pp. 10	062-1066.								
	61	LEE, et al., Proceedings 1998, Vol. 95, No.16, pp.		nal Academy of	Science of Th	ne United Sta	ites of Ame	erica							
	62	MAILLIOT, et al., Annals	of The New Yo	ork Academy of S	cience, 2000,	Vol. 920, pp.	107-114.								
	63	MATTSON, et al., The Jo	urnal of Clinica	al Investigation, 2	001, Vol. 107,	No. 3, pp. 24	17-254.								
AMINER	/Paul	Dickinson/		DATE CON	SIDERED 03.	/26/2008									

									rtment of Co nd Tradema		Atty. Doc P29138	ket No.	Application No. 10/564,407				
	NFORM		N D BY					AT	TEMENT	MENT Applicant Akiko ITAI et al.							
: :	(Us	se sev	vera	l sh	eets	sifr	ece	essa	ıry)		Filing Dat July 16, 2		Group Unknown				
·			_	_			_		U.S. PATEN	T DOCUM	ENTS						
EXAMINER INITIAL			oocı	JME	NT I	NUMI	BER		DATE	CLASS	su	BCLASS	FILING DATE IF APPROPRIATE				
								_	FOREIGN PAT	ENT DOCL	MENTS						
			oocı	IME	NT N	JI IMI	3FR		DATE COL		INTRY	CLASS	SUB	CLASS	TRANSI YES	LATION NO	
		9 9 6 0 7 4		4	06 1515 65 02/27/00 GE	GERM/	WYGB										
	97	1		0	9	3	1	5	03/13/97 W.I.P.O								
	11	•	5	1	2	3	9	9	10/26/99	JAPAN							
	9	-	2	2	7	5	6	1	09/02/97	JAPAN							
									S (Including Au								
	64	MA	TTS	ON	, et	al.,	Cel	and	d Tissue Res	earch, 20	000, Vol. 30	01, No. 1, pp	. 173	-187.			
	65	MIL	MILLET, et al., The Journal of Biological Chemistry, 2000, Vol. 275, No. 20, pp. 15114-15121.														
	66		MORI, et al., Yakugaku Zasshi, 1975, Vol. 95, No. 12, pp. 1477-1482, together with an English language abstract of the same.														
	67	NOI	BLE	, et	al.,	Net	ıror	, 20	03, Vol. 38,	No. 4, pp	. 555-565.						
	68	PALANKI, et al., Current Medicinal Chemistry, 2002, Volume 9, No. 2, page 219-227. PHIEL, et al., Nature, 2003, Vol. 423, No.6938, pp. 435-439. PIU, F. et al., Molecular and Cellular Biology, 2001, Vol. 21, No. 9, pp. 3012-3024.															
	65																
	79	ROI	BER	T-F	PIES	SA	RD,	et a	al., Pharmaco	eutical So	ience, 199	7, Vol. 3, No	. 5/6,	pp. 295-	299.		
	71	SAT	го, (et a	il., T	he .	Jour	nal	of Biological	Chemist	ry, 2002, V	ol. 277, No.	44, p	p. 42060	42065.		
	82	UMI tran							ntier, 2002,	Vol. 9,	No. 2, pp.	88-91, tog	ether	with En	glish lang	guage	
	79	UPA	ADH	ΥA	Ү, е	t al.	, Inc	dian	Journal of H	leterocyc	lic Chemist	try, 1991, Vo	l. 1, N	lo. 2, pp.	71-74.		
	74	WA	ISSI	ER,	et a	al., <i>F</i>	۱rch	iv d	er Pharmazi	e, 1998, \	/ol. 331, N	o.1, pp. 3-6.					
	79	WA.	JAN	IT,	Cell	ular	Sig	nali	ng, 2001, Vo	l. 13, No.	6, pp. 389	-400.					
	79	WE	ST,	et a	al., <i>A</i>	Anal	ytic	al B	iochemistry,	1990, Vo	lume 190,	No. 2, pp. 2	54-25	8.			
	77			_					e, 1999, Vol.								
	79	YIN	, et	al.,	Cel	, 19	98,	Vol	. 93, No. 5, p	p. 875-8	34.						
	79	XU,	et a	al., '	The	Jou	rna	of	Neuroscienc	e, 2001, \	/ol. 21, No	.1, RC118, 5	page	es.			
	80	_				_			lournal of Cli			2001, Vol. 10	07, No	o. 2, pp. 1	135-142.		
	81	YUA	٩N,	et a	1., S	cier	nce,	200	01, Volume 2	93, pp. 1	673-1677.						
	82								u Zasshi, 19 ame.	976, Vol.	96, No. 2	l, pp. 165-1	69, to	gether v	vith an Ei	nglish	
EXAMINER	/Paul	Dickir	nsor	1/				_		DA	TE CONSI	DERED 03	/26/2	800			
									er or not cital le copy of thi						ne through	n citation	

P29138.P3	30															Sheet 6 of
FORM PTO-	1449								rtment of Co		Atty. Docke P29138	et No.	_	Applica 10/564,		
I	NFORM	ATI				SUF		AT	TEMENT		Applicant Akiko ITAI	et al.				
· :	(U:	se s				s if i		essa	ry)		Filing Date			Group		
7)											July 16, 20	04		Unknow	vn	
·-			_	_			_		U.S. PATEN	IT DOCUME	ENTS			L		
EXAMINER INITIAL			DO	CUM	ENT	NUM	BER		DATE	NAME	CLASS	SUBCLASS		FILING IF APPRO		
		4	5	6	0	5	4	9	12/24/85	RITCHE	Y					
		4	7	4	2	0	8	3	05/03/88	RITCHE	Υ					
		4	7	2	5	5	9	0	02/16/88	RITCHE	Υ					
		5	9	5	8	9	1	1	09/28/99	EVANS	et al.					
		4	2	8	7	1	9	1	09/01/81	COBUR	N et al.					
		3	3	3	1	8	7	4	07/18/67	HERBE	RT et al.					
		3	9	0	6	0	2	3	09/16/75	BUCHE	L et al.					
	l	4	6	6	1	6	3	0	04/28/87	HARIGA	AYA et al.					
		6	2	2	5	3	2	9	05/01/05	RICHTE	R et al.					
		6	2	6	2	0	4	4	07/17/01	MOELL	ER et al.					
		6	4	1	0	5	8	6	06/25/02	MOELL	ER et al.					
	2002	1	0	0	2	1	9	9	01/03/02	JEPPES	SEN et al.					
	2002	1	0	1	9	4	1	2	02/14/02	ANDER	SEN et al.					
	2002	1	1	6	5	3	9	8	01/07/02	JEPPES	SEN et al.					
	2003	1	0	6	9	2	6	7	04/10/03	MOELL	ER et al.	i –				
		5	8	5	2	0	2	8	12/22/98	SUTO 6	et al.					
		5	8	1	1	4	2	8	09/22/98	SUTO e	t al.					
		5	9	3	5	9	6	6	08/10/99	SUTO 6	t al.					
		-			_				FOREIGN PAT	ENT DOCU	MENTS					
			200	21.054	CAIT	NUM	050		DATE	COL	INTRY	CLASS	CLID	CLASS	TRANSL YES	ATION NO
	10	-	DO	8	7	4	9	1	04/07/98	JAPAN	WIKI	CLASS	306	CLASS	123	
	10	1	0	1	8	5	1	4	07/12/00	E.P.O		-+		-+		
	00	,	_	<u>,</u>	5	2	3	4	02/03/00	W.I.P.O						
	10	-		4	5	7	3	8	02/17/98	JAPAN			_			
	93	7		2	4	1	1	5	12/09/93	W.I.P.O						
	96	1	_	1	7	8	3	2	03/13/96	W.I.P.O						
	98	7	_	2	<u>,</u>	8	6	4	05/22/98	W.I.P.O		-				
	99	7	-	2	4	4	0	4	05/20/99	W.I.P.O						
	75									<u> </u>	Date, Pertinen	t Pages. Etc.	<u> </u>	1		
	Т	V	3 M	A #	+	20	CI	٠٠٠٠	Phoru	n.B. 11	Vol.44	(4), -	7 34	1-74	- /190	4)
	 	16		w.,,		٠,	2			- v/Juli		·	, ,			
EXAMINER	/Paul	Dic	kino	on/					_	DA	TE CONSID	ERED 03/	26/2	800		
*EXAMINER					nside	ered	wh	ethe	er or not cita				_		ne through	citation
if not in confo																

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /P.D./

P29138.P30 Sheet 7 of 9 FORM PTO-1449 U.S. Department of Commerce Atty. Docket No. Application No. Patent and Trademark Office P29138 10/564 407 Applicant INFORMATION DISCLOSURE STATEMENT Akiko ITAI et al. BY APPLICANT (Use several sheets if necessary) Filing Date Group July 16, 2004 Unknown U.S. PATENT DOCUMENTS FILING DATE EXAMINER CLASS SUBCLASS IF APPROPRIATE INITIAL DOCUMENT NUMBER DATE NAME 0 2 2 8 4 02/08/00 MANTI O et al. 6 8 6 6 5 3 3 0 9 11/25/03 SAVNDER et al. 2004 8 5 n 05/06/04 SAVNDER et al. 07/02/02 FANCELLI et al. 6 4 1 4 0 3 FOREIGN PATENT DOCUMENTS TRANSLATION DOCUMENT NUMBER CLASS SUBCLASS DATE COUNTRY YES NO WIPO 99 1 7 09/16/99 2002 5 0 6 0 7 2 02/26/02 JAPAN 99 1 5 5 6 6 3 11/04/99 W.I.P.O 00 1 0 3 9 9 1 01/27/00 WIPO 3 5 4 4 2 06/22/00 WIPO 22 01/04/01 W.I.P.O 1 0 0 1 3 01 01 4 4 1 7 06/21/01 WIPO 09/20/01 WI.P.O ٥1 6 6 4 8 01 1 9 8 2 9 0 12/27/01 W.I.P.O 0 6 01/15/04 JAPAN 2004 5 1 1 4 WIPO 02 1 2 8 8 1 9 04/11/02 E.P.O 1 0 8 8 8 1 9 04/04/01 04/24/01 JAPAN 2001 1 1 4 7 6 8 07/21/93 E.P.O ٥ 5 5 8 4 9 6 9 7 6 01/18/94 JAPAN 2 7 3 10/23/91 FPO 0 4 5 4 2 1 7 9 8 1 08/07/92 JAPAN OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.) 83 English language Abstract of JP11-512399. English language Abstract of JP 9-227561. 84 English language Abstract of JP 10-87491. 85

86 English language Abstract of JP 10-45738. English Language Abstract of 2-138260. 87 English Language Abstract of JP 62-81359. 88 English Language Abstract of JP 2000-80041. DATE CONSIDERED 03/26/2008 **FXAMINER** /Paul Dickinson/ *EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

EXAMINER: /Paul Dickinson/

DATE CONSIDERED 03/26/2008

*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to appolicant.

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

FORM PTO	D-1449								artment of Co and Tradema		Atty. Doc P29138	ket No.		Application No. 10/564,407							
	INFORM	IATI		DIS Y AF				ΤA	TEMENT	EMENT Applicant Akiko ITAI et al.					I.						
	(U	se s	eve	ral s	heet	s if	nece	essa	ary)		Filing Dat				Group Unknown						
											L										
EXAMINER		Т						-	U.S. PATEN								G DATE ROPRIATE				
INITIAL	-	4 6 5 9 7 1 0				0	07/21/87	07/21/87 SATO et al.				SUI	BCLASS	IF APPE	ROPRIATE						
	+	4	-6	9	0	9	2	4	09/01/87	SATO 6		+	\rightarrow	_							
		14	-	-					FOREIGN PAT							L					
-		Т			Y			_					Т			TRANS	SLATION				
		<u> </u>	DO	CUM	ENT	NUM	BER		DATE		NTRY	CLASS	CLASS SUE		CLASS	YES NO					
	4	-	2	_1	7	9	1	6	08/07/92	JAPAN											
	62	-		3	0	7	8	0	02/09/87	JAPAN											
	2000	-	1	6	9	4	7	9	06/20/00	JAPAN											
	52	-	1	1	0	8	3	5	09/17/77	JAPAN											
		2	0	3	1	4	1	0	04/23/80	GERM/	0.0		\perp								
		1	4	8	1	7	1	3	10/11/65	FRANC			\perp								
	2002	51	ζ¢	197	7 7				5/8/02	JAPA	FW		_			_					
													_			-					
		_																			
		L											_								
		_											_								
		_	_				_						\perp								
							_								!						
		_						_	S (Including Au		Date, Pertine	ent Pages	, Etc.)								
	87	-			_	_	_		t of JP09-16												
	88	-			<u> </u>	<u> </u>			t of JP63-10												
	89	-	_	_			_		t of JP11-21												
	90	-	<u> </u>		_				t of JP11-21			-									
	91	-			_				t of JP8-175												
	92	-	_			_		_	t of JP4-217												
	93	-	<u> </u>		<u> </u>	<u> </u>			t of JP 62-3												
	94	En	iglis	n La	ingu	age	Abs	trac	t of JP 2000	169479											
	+-	₩			_																
		-																			
		⊢																			
	-	-				_															
EXAMINER	R /Paul	Dist	.:	/						DA	TE CONSII	DEBED	00/0	2010	2000						

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /P.D./